

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1 and 14 in accordance with the following:

1. (CURRENTLY AMENDED) An airgap type etalon comprising:

a fixing member having at least one flat surface;

a first parallel member, which is transparent to incident light and has parallel flat surfaces, one of said parallel flat surfaces thereof being joined to said flat surface of said fixing member;

at least one second parallel member, which has parallel flat surfaces in which a distance between said parallel flat surfaces thereof is greater than a distance between said parallel flat surfaces of said first parallel member, and has an expansion coefficient different from that of said first parallel member, one of the flat surfaces of said second parallel member being joined to said flat surface of said fixing member so as to surround the outer periphery of said first parallel member; and

a transparent member, which is transparent to incident light and has opposite flat surfaces, one of said flat surfaces thereof being joined to the other flat surface of said second parallel member, said other flat surface being opposite to the joined surface to said fixing member;

wherein a Fabry-Perot interferometer is formed based on an airgap positioned between the flat surface of said first parallel member and the flat surface of said transparent member facing each other, and wherein a distance between the parallel flat surfaces and the expansion coefficient of each of said first and second parallel members, are set based on a variation of an air refractive index due to a temperature fluctuation, so that when a temperature rises, a distance between the surfaces of said first parallel member and said transparent member that face each other, is set to be longer than an initial value before the temperature rises, to enable the compensation of ~~to obtain temperature dependency of a transmission wavelength characteristic which is greater than a predetermined value, so that a wavelength temperature dependency of a wavelength characteristic of incident light is capable of being~~

compensated.

2. (ORIGINAL) An airgap type etalon of claim 1, wherein
said fixing member has a through-hole for passing light therethrough,
said first parallel member is formed with an antireflection coating on one flat
surface thereof, and this flat surface formed with said antireflection coating is joined to said flat
surface of said fixing member around said through-hole, and
said transparent member is formed with an antireflection coating on the other flat
surface thereof opposite to the joined surface to said second parallel member.

3. (ORIGINAL) An airgap type etalon of claim 1, wherein
said fixing member is transparent to incident light, and is formed with an
antireflection coating on a surface opposite to said flat surface thereof, and
said transparent member is formed with an antireflection coating on the other flat
surface thereof opposite to the joined surface to said second parallel member.

4. (ORIGINAL) An airgap type etalon of claim 1, wherein reflection augmenting coatings
are formed on said flat surfaces of said first parallel member and said transparent member
facing each other, respectively.

5. (CANCELLED)

6. (CANCELLED)

7. (PREVIOUSLY AMENDED) An airgap type etalon of claim 1, wherein temperature
dependency of said transmission wavelength characteristic is set to be 25pm/ °C or more.

8. (CANCELLED)

9. (CANCELLED)

10. (CANCELLED)

11. (CANCELLED)

12. (CANCELLED)

13. (CANCELLED)

14. (CURRENTLY AMENDED) An airgap type etalon comprising:

a fixing member having a surface;

a first parallel member which is transparent to incident light and has parallel surfaces and an expansion coefficient, one of said parallel surfaces being coupled to the surface of said fixing member;

a second parallel member having parallel first and second surfaces which are spaced apart by a distance which is greater than a distance between the surfaces of said first parallel member, said second parallel member having an expansion coefficient, the first surface of said second parallel member being coupled to the surface of said fixing member; and

a transparent member having a surface coupled to the second surface of said second parallel member,

the distance between the parallel surfaces and the expansion coefficient of each of said first and second parallel members being set based on a variation of an air refractive index due to a temperature fluctuation, so that when a temperature rises, a distance between the surfaces of said first parallel member and said transparent member that face each other, is set to be longer than an initial value before the temperature rises, to enable compensation for so as to produce an increased temperature dependency of a transmission wavelength characteristic which is greater than a predetermined value, so that a wavelength temperature dependency of a wavelength characteristic of incident light to said airgap type etalon is capable of being compensated.